

Digital input module CPX-AP-L-16NDI-PI

Part number: 8176326

FESTO



Data sheet

Feature	Value
Dimensions W x L x H	90 mm x 106 mm x 70 mm
Type of mounting	With H-rail
Product weight	145 g
Ambient temperature	-20 °C...50 °C
Storage temperature	-40 °C...70 °C
Relative air humidity	5 - 95 % Non-condensing
Degree of protection	IP20
Corrosion resistance class (CRC)	0 - No corrosion stress
Vibration resistance	Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Contamination level	2
Overvoltage category	II
Max. cable length	30 m inputs 50 m system communication
Information on max. cable length	Power supply according to nominal voltage
LABS (PWIS) conformity	VDMA24364 zone III
Cleanroom class	Statically installed element, no meaningful evaluation possible according to ISO 14644-1
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
KC characters	KC EMC
Certification	RCM compliance mark
Note on materials	RoHS-compliant Halogen-free
Housing material	PA66 PVC
Diagnostics via LED	Diagnostics per module Status per channel

Feature	Value
Diagnose per internal communication	Short circuit/overload in sensor supply Electronics/sensors overvoltage Electronics/sensors undervoltage
Max. address capacity inputs	2 byte
Communication interface, function	System communication XF10 IN / XF20 OUT
Communication interface, connection type	2x socket
Communication interface, connection technology	RJ45
Communication interface, protocol	AP
Communication interface, shielding	yes
Power supply, function	Incoming electronics/sensors and load
Power supply, type of connection	Plug
Power supply, connection technology	Push-pull according to IEC 61984
Power supply, number of pins/wires	4
Voltage forwarding, function	Outgoing electronics/sensors and load
Voltage forwarding, connection type	Socket
Voltage forwarding, connection technology	Push-pull according to IEC 61984
Voltage forwarding, number of pins/wires	4
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Nominal operating voltage DC	24 V
Nominal operating voltage DC for electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25 %
Max. power supply	2 x 4 A (external fuse required)
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 32 mA
Power failure buffering	10 ms
Reverse polarity protection	yes
Electrical connection input, function	Digital input
Electrical connection input, connection type	2x socket
No. of inputs	16
Input characteristics	As per IEC 61131-2, type 3
Switching level	Signal 0: (PS - 5 V) to PS Signal 1: 0 V to (PS - 11 V)
Input switching logic	NPN (negative switching) 2-wire sensors as per IEC 61131-2 3-wire sensors as per IEC 61131-2
Input debounce time	0.1 ms 3 ms (standard) 10 ms 20 ms
Fuse protection inputs (short circuit)	Micro fuse
Max. residual current of inputs per module	4 A
Electrical isolation of inputs between channels	no
Digital inputs, electrical isolation of input - internal communication	no
Electrical connection output, connection technology	Push-pull according to IEC 61984